

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A system for use with a piano, organ, or musical keyboard, comprising:

an insertable sensor sensing either white key or black key movement or both white and black key movement, said sensor insertable between keys and a bottom surface of an open-position fallboard of the piano, organ or keyboard, said sensor sensing movement of a portion of the key behind the open-position fallboard, and said insertable sensor not requiring disassembly of the piano, organ or keyboard; and

circuitry to process signals from said sensor and to process said key movement information.

Claim 2 (previously presented): The system of claim 1 wherein said insertable sensor detects key depression and said system further comprises a sensing strip operatively connected to said sensor for sensing movement of a portion of the key hidden from view.

Claim 3 (original): The system of claim 2 wherein said sensing strip operatively connects to one or more sensors per key to sense a proportional amount of hidden key movement.

Claim 4 (previously presented): The system of claim 1 wherein said sensor comprises an energy contact and a corresponding energy receiving contact that by itself or when combined with another sensor produces an electrical signal strength proportional to said key movement of the key.

Claim 5 (original): The system of claim 4 wherein said energy contact comprises an optical emitter and an optical receiver that converts reflected optical energy provided by a key surface to an electrical signal proportional to displacement of the key.

Claim 6 (previously presented): The system of claim 2 wherein said sensing strip is operatively connected to a flexible strip that moves in relation to an associated key and provides energy to said sensing strip that is proportional to an amount of said key movement.

Claim 7 (original): The system of claim 6 wherein said sensing strip and said flexible strip comprise a magnetically coupled emitter and receiver that converts a magnetic field strength to a corresponding electrical signal proportional to a displacement of the key.

Claim 8 (original): The system of claim 6 wherein said sensing strip and said flexible strip comprise a capacitively coupled emitter and receiver that converts an electric field strength to a corresponding electrical signal proportional to a displacement of the key.

Claim 9 (original): The system of claim 6 wherein said flexible strip comprises a piezo-electric strip that converts mechanical energy to a negative or positive electrical signal proportional to a pressure by which the key is depressed or released.

Claim 10 (original): The system of claim 6 wherein said sensing strip and said flexible strip comprise two or more electrical contact point pairs electrically biased that close when the key is at rest and open sequentially as the key is depressed.

Claim 11 (original): The system of claim 6 wherein said sensing strip and said flexible strip comprise two or more optical coupler switches electrically biased that are switched on when the key is at rest and open sequentially as the key is depressed.

Claim 12 (original): The system of claim 1 wherein said circuitry further processes key-note velocity.

Claim 13 (previously presented): The system of claim 1 wherein said circuitry transmits at least key-note ON/OFF information.

Claim 14 (previously presented): The system of claim 1 wherein said sensor further comprises an insertable protector to protect said sensor from ambient light interference.